# National Public Safety Planning CKET FILER COMMUNICATION **Advisory Committee**

JAN 27 1993

NPSPAC REGION 2, ALASKA

FEDERAL COMMUNICATIONS COMMISSION OFFICE OF THE SECRETARY RECEIVED

February 1, 1993

Ms Donna Searcy Secretary Federal communications Commission Washington, DC 20554

JAN 27 1993

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Dear Ms Searcy:

Please find enclosed our committee's Frequency Utilization Plan for the State of Alaska formulated in accordance with FCC Dockets 87-112 and 87-359.

Our notice of initial meeting appeared in the Anchorage Daily News (a state wide publication) on November 30, 1992. In addition, I made personal telephone calls to various Public Safety agencies in the south central area of the State advising them of the initial meeting. The meeting was held as scheduled on December 4, 1992 at the Fire Training Center in Anchorage, Alaska. Gene Soules was elected Chairperson. Three Committee Members and a Recording Secretary were elected. The committee represents a good cross section of Public Safety communications users in the State of Alaska, with a Local Government, a Borough, and the State of Alaska all having representation.

On January 8, 1992 the committee scheduled a second meeting to allow additional input from any interested parties. The meeting was advertised by mailing to all APCO members in the State, and again with personal phone calls. Though encouraged, there seemed to be little interest for special input from any area or agency across the State at this time. We have thus made provisions for each area based on known population and knowledge of existing radio communications systems.

Alaska's filing date was established as February 1, 1993. In order to comply, some of the time frames had to be compressed. I hope we will receive consideration in this matter, with my assurance that every Public Safety agency in the State of Alaska received opportunity to form the provisions of this plan as submitted.

Sincerely,

Gene Soules, Chairperson Region 2 State of Alaska

800 Mhz Planning

Municipality of Anchorage

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Anchorage, AK 99507

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# PUBLIC SAFETY RADIO

# COMMUNICATIONS PLAN

# FOR

\* REGION 2

THE STATE OF ALASKA

# ITEMS TO CHECK PERTAINING THE PLAN REGION Q.

- 1) Cover page identifying the region Yes
- 2) Chairperson name, address, phone number and signature See page <u>Gver Page</u>.
- 3) Committee members name, organizational affiliation, address, phone numbers. See page 23
- 4) Summary of major elements of the plan. See page 2.3.
- 5) General description of how spectrum is allotted among users. See page 19.
- 6) Explanation of how the requirements of all eligibles are considered and met. See page 5.
- 7) Explanation of how eligibles are prioritized in areas where not all eligibles may receive licenses. See page 22.
- 8) Explanation of how the plan has been coordinated with adjacent regions. See page <u>↓</u>.
- 9) Description of how the plan puts spectrum to best possible use by
  - requiring system design with minimum coverage areas (see page 2)
  - II. Assigning frequencies so that maximum frequency reuse and offset channel use may be made (see page√)

111. making use of trunking (see page) ) requiring small entities with minimal IV requirements to join together on a single system where possible (see page 16-18) Explanation of how interoperability channels are managed (see page 6) "Slow Growth" language. See Page \(\frac{1}{\int}\). Does the plan refer to **Give-Back** frequencies? If yes, give page number\_\_\_\_\_. Appeal Process. See page 22. 15) Does the plan provide for regional mutual aid channels, in addition to the five (5) common channels. If so, are there guards bands for these channels. Similar to the Generic Plan describe the formation of 16) the committee; Advertising - copy should be attached to legal ١. notice, letters to the industry, etc. ÏII. Who could vote? and what procedure was used after first meeting? see page Append. A. III. How was the final plan adopted. Was it by members attending a meeting or mail ballot? BALLOT

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PUBLIC SAFETY RADIO

communications plan

FOR

\* REGION 2

THE STATE OF ALASKA

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### 1.0 SCOPE

### 1.1 Introduction

In December of 1983, the United States Congress directed the Federal Communications Commission (PCC) to establish a plan to ensure that the communications needs of state and local public safety authorities would be met. By their regular means of initiation, the FCC began the process of developing such a plan. Through their efforts, and the efforts of the National Public Safety Planning Advisory Committee (NPSPAC) the plan was begun.

The National Public Safety Planning Advisory Committee provided an opportunity for the public safety community and other interested members of the public to participate in an overall spectrum management approach by recommending policy guidelines, technical standards, and procedures to satisfy public safety needs for the foreseeable future. After consideration of NPSPAC's Final Report and comments filed in Docket No. 87-112, a Report and Order was released by the FCC in December 1987, which established a structure for the National Plan that consists of guidelines for the development of regional plans.

The National Plan provides guidelines for the development of regional plans. The particulars of this plan are found in FCC 87-359, which contains the required steps and contents for regional plan development. It is on this document that this plan is developed.

### 1.2 Purpose

Public safety communications has, for many years, been inadequate throughout the United States. This is as true for ALASKA as it is for any other state. Many, if not all, public safety radio users are constantly bombarded with outside interference, noise, and over crowding. It is with these problems in mind that this plan was developed.

This regional plan was developed with the objective of assuring all levels of public safety/public service agencies that radio communications in the near and distant future will not suffer from the problems of the past. The allocation of frequencies was done in as equitable a way as possible. The goal was to supply a pool of frequencies for each county and a pool for state agency use with adequate reserve allocations for future needs in all areas, and a method to appeal initial allocations based on need.

The National Plan, as developed by NPSPAC, was followed very closely in all considerations for frequency allocation, re-use, turn back, regional interoperability, spectrum requirements and adjacent region operations. This plan should provide the flexibility to accommodate the growth and changes which are bound to occur in public safety and public service communications operations long into the future.

### 2.0 AUTHORITY

### 2.1 Regional Planning Committee

The development of the Public-Safety Radio Communications Plan for Region 2, the State of ALASKA, has followed the requirements of the FCC's Report and Order as issued in the matter of General Docket 87-112.

In accordance with the FCC's Report and Order 87-112, the Associated Public-Safety Communications Officers Inc. (APCO) recommended to the Commission the appointment of a "Convenor" for ALASKA Region 2. The Convenor served as the coordinator for the assembly and formation of the planning committee

committee. Participants in the formation of the Regional Planning Committee represent interested parties from both

### 2.3 National Interrelationships

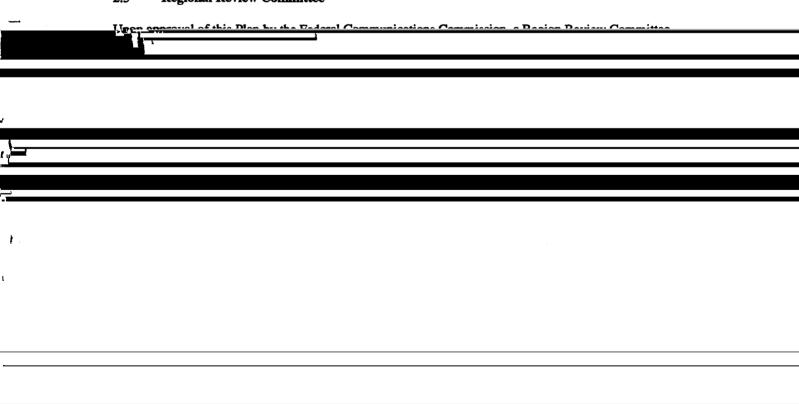
The Regional Plan is in conformity with the National Plan. If there is a conflict between the two plans, the National Plan will govern. It is expected that Regional Plans for other areas of the country may differ from this plan due to the broad differences in circumstance, geography, and population density. By officially sanctioning this plan the Federal Communications Commission agrees to its conformity to the National Plan. Nothing in the Plan is to interfere with the proper functions and duties of the organizations appointed by the FCC for frequency coordination in the Private Land Mobile Radio Services, but rather it provides procedures that are the consensus of the Public Safety Radio Services and Special Emergency Radio Service user agencies in this Region. If there is a perceived conflict then the judgment of the FCC will prevail.

### 2.4 Federal Interoperability

Interoperability between the Federal, State and Local Governments during both daily and disaster operations will primarily take place on the five common channels identified in the National Plan. Additionally, through the use of S-160 or equivalent agreements, a licensee may permit Federal use of a non-Federal communications system. Such use, on other than the five identified common channels, is to be in full compliance with FCC requirements for government use of non-government frequencies (Title 47 CFR, sec 2.103). It is permissible for a non-Federal government licensee to increase channel requirements to account for 2-10 percent increase in mobile units, dependent on the amount of Federal Government Agencies involvement in its area, provided that written documentation from Federal agencies supports at least that number of increased units.

### 2.5 Regional Review Committee

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### 3.0 SPECTRUM UTILIZATION

This portion of the Plan provides a basis for proper spectrum utilization. Its purpose is to guide the Local APCO Frequency Advisor and/or the Regional Review Committee in their task of evaluating the implementation of this plan within this Region.

### 3.1 Region Defined

Region 2 is the State of ALASKA. This region is the result of definition by the Federal Communications Commission as a result of recommendations made in the National Public Safety Planning Advisory Committee (NPSPAC) plan as submitted and approved and contained in Docket 87-112. For purposes of this plan the State of ALASKA shall be defined as all the lands and waters contained within the boundaries of the State of ALASKA.

### 3.2 Region Profile (Demographic Information)

The purpose of this section is to provide the basis for the assignment of frequencies, and their re-use. Since the frequency allocation formula used is based on population within a borough, it is necessary to provide this information within this plan. Below is the data used in the determination of frequency allocations.

### 3.2.1 State Of ALASKA Population And Expected Growth Percentage. (See Appendix B)

The population of the state is (1990 Census) is broken down borough and city. The areas consist of three Municipalities, 13 boroughs and 151 cities (see Appendix B). The four boroughs; Anchorage, Fairbanks, Kenai and Juneau represent the major population centers with 384,543 (70%) of the State's 550,043.00 total population. Anchorage alone represents 42% of the population of the state of Alaska.

### 3.2.2 Geographical Description

There are 10 boroughs in the state with a total land mass of 586,400.00 square miles. The largest borough is North Slope, with a total of 85,000.00 square miles. The population per square mile is somewhat sparse which generally indicates that the concentration of radio users for public safety activities is also sparse. All of these items were taken under consideration in the allocation plan.

### 3.2.3 Usage Guidelines

All systems operating within the Region having five or more channels will be required to be trunked. Those systems having four or less channels may be conventional or trunked.

The FCC, in its Report and Order states, "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not meet operational requirements. Exceptions will not be granted routinely, however, and strong evidence showing why trunking is unacceptable must be presented in support of any request for exception."

### 3.2.3 Usage Guidelines (continued)

Systems of four or less channels operating in the conventional mode who do not meet FCC loading standards will be required to share the frequency on a non-exclusive basis.

Public Safety communications at the state level, as it impacts the Region, will be reviewed by the Committee. State-wide public safety agencies will submit their communications plans for impact approval if they utilize communications systems within the Region and those portions of such systems must be compatible with the Regional Plan.

The next level of communication coverage will be a borough/multiple municipality area. Those systems that are designed to provide area communication coverage must demonstrate their need to require such wide area coverage.

This would apply in a situation such as a city requesting coverage of an entire borough. Communication coverage beyond the bounds of a jurisdictional area of concern cannot be tolerated unless it is critical to the protection of life and property. If the 800 MHz trunked radio technology is utilized, the system design must include as many borough/city government public safety and public service radio users as can be managed technically.

The borough/multiple municipality agency(ies), depending upon systems loading and the need for multiple systems within an area, must provide intercommunications between area-wide systems. In a multi-agency environment, a lead agency using the 800 MHz spectrum, which is an agency or organization having primary response obligations in the geographic area, shall be responsible for coordinating the implementation the Common Channels in this band as mandated by the National Plan. Such implementation must be reviewed and approved by the Local APCO Frequency Advisor, and at his/her discretion, the Regional Review Committee.

Municipal terminology often differs. In order to provide a title for the next level of communications the term City is used to define the level below borough-wide. City communications for public safety and public services purposes must provide only the communications needed within its boundaries. However, if the total number of radios in service does not reach minimum loading criteria for a trunked system, that must consider utilizing the next higher system level if 800 MHz trunked radio is available in the area. As those higher level systems reach capacity, the smaller system communicators in public safety and public service must then consider uniting their communications efforts to formulate one large system or forfeit use of the limited 800 MHz spectrum.

Where smaller conventional 800 MHz needs are requested, those frequencies to be utilized must not interfere with the region's trunked systems. The 800 MHz trunked radio system is to be considered the higher technology at this time and in greater compliance with FCC guidelines. The amount of interference that can be tolerated depends on the service affected. Personal life and property protection shall receive the highest priority and disruptive interference with communications involved in these services in an area shall not be tolerated. Any co-channel interference within an authorized area of coverage will be examined on a case by case basis by the Regional Review Committee.

# 3.4 Technical Design Requirements For Licensing

### 3.4.3 Determination of Coverage (continued)

### **Received Signal Strength:**

For purposes of this plan, received signal strength shall be the determining factor which defines the actual boundary of a system. The minimum signal level which marks the outer boundary of a system shall be 40 dBu.

### Antenna Height:

Shall be the height of the antenna above the average terrain surrounding the tower site.

### Effective Radiated Power (ERP):

The ERP is the transmitter output power times the net gain of the antenna system. The actual formula is: ERP (w) equals Power(w) times Antilog (net gain in dB divided by 10).

### **Environment Type:**

OKUMURA/HATA METHOD - The Okumura method uses four different classifications to describe the average terrain around a transmitter site or area. The classifications are:

1-URBAN; Which is built-up city-crowded with large buildings or closely interspersed with houses and thickley-grown trees. This would include the downtown area of a major city.

2-SUBURBAN; Which is a city of highway scattered with trees, houses and buildings. This would include the downtown area of a large city.

3-QUASI-OPEN; Is an area between suburban and open areas. This includes areas outside of city limits that have few buildings and houses.

4-OPEN; Is an area where there are no obstacles such as tall trees or buildings in the propagation path or a plot of land which is cleared of anything for 300 to 400 meters ahead. This would include farm land, open fields, etc.

Preparation of these requirements shall be the responsibility of the applicant. The Federal Communications Commission provides, in part 90.309(a)(4) of the Rules and Regulations, some additional guidance for these calculations.

### 3.4.4 Annexations And Other Expansions

It is well known that as cities grow, annexations occur. When an expansion of the present city limits of any city currently using an 800 megahertz system within the spectrum as herein specified occurs, it is understood that the existing system may have to be expanded and its range increased. This is a

### 3.4.5 Coverage Area Description

All applicants shall provide with their applications a map showing the jurisdictional boundaries to be covered by the system, and the calculated system coverage. This map shall display the location of the system transmitter(s), including control stations. It is recommended that a U.S. Geological Survey (USGS) Quad topographical map be used for this purpose. If not available, a high quality locally produced map or a highway map may be substituted. Regardless of the type map used, the name of the applicant and the scale of the map shall be displayed on the map.

### 3.4.6 Give-Back Frequencies

All agencies participating in the use of the new 800 megahertz spectrum shall prepare and submit a plan for the abandonment of their currently licensed frequencies in the lower bands. These released frequencies shall be available for reassignment to those agencies not migrating to 800 MHz at this time.

These released frequencies shall be returned to the radio service from which it was assigned. These frequencies shall then be available for reassignment by the assignment / coordination criteria in effect for that particular service by the regular FCC authorized coordinator for that service.

Frequencies which are to be abandoned by an agency shall not be handed down to another agency within the respective jurisdiction. Though this may seem a convenient method to re-use existing radio equipment, the reassignment must be handled through the normal process. It is recommended that any jurisdiction wishing to "hand down" frequencies to another agency submit the proper coordination and application forms with the document of release. This will put the applicant in a better posture for reassignment of the frequency in question. It should be noted that even though this procedure is followed, there is no guarantee that a particular frequency will be assigned to the returning jurisdiction.

The time frame allowed for phasing into 800 MHz and out of the lower currently licensed bands will be considered on a case by case basis by the review committee. Generally, one year will be considered acceptable in most cases, with two years as a maximum. Any agency requiring more than two years shall provide documents stating the reasons for the delay, and give the estimated time of completion.

### 3.4.7 Unused Spectrum

Due to the fact that all of the frequency spectrum is not needed at this time, the excess channel pairs will be returned to a reserve pool. These channels may be used for conflict with adjacent Region allocations or may simply remain within this Region until needed. This does not imply that these frequencies are unavailable, only that before they can be utilized within the Region they must be coordinated via the regular APCO coordination process and within the guidelines set forth in this plan. Where possible, the channels designated for a jurisdiction in this plan shall be used.

### 3.4.8 Adjacent Region Considerations

There was no need for Adjacent State coordination for region 2.

### 3.5 Initial Spectrum Allocation

### 3.5.1 Frequency Sorting Methodology

The initial spectrum allocation for the Region was performed by APCO. The purpose of the frequency sorting is to specific eligibles and to pools for future assignments is two-fold:

- A) The assignments must result in a high degree of spectrum efficiency, and
- B) The assignments must result in a low probability of co-channel and adjacent channel interference.

### 3.5.2 Blocked Channels

In the Region there are five mutual aid channels which must be blocked out to prevent the computer from making assignments on these channels. (Since the mutual aid channels are spaced at 0.5 MHz intervals, other Region-wide systems are spaced at 0.5 MHz and placed adjacent to the mutual aid channels. This procedure reduces the impact of blocked adjacent channels by virtue of the fact that the channel plan already has protection spacing on each side of the mutual aid channels.)

These Region-wide blocked channels are identified by FCC channel number, tabulated and they become input to the computer program.

### 3.5.3 Transmitter Combining

The sorting considered a minimum frequency separation between any two channels assigned to the same eligible at the same site. This separation is provided in order to enable more efficient combining of multiple transmitters to a single antenna. These separated blocks of frequencies also have a maximum size. That is, if the eligible has more frequencies than the maximum size of the combining block, then a second compatible block is created, and so on. Each of these parameters is adjustable in the program on a global basis. The default parameters chosen are 0.25 MHz minimum spacing and five channel blocks.

### 3.5.4 Special Considerations

There are licensees in the 806-821/852-866 MHz spectrum who plan to expand existing systems into the 821-824/866-869 MHz bands. Some of the existing radio units are unable to operate on 12.5 KHz separated carrier frequencies. The result is that these radios can only operate on "even" FCC numbered channels in the 821-824/866-869 MHz band. The computer program is able to take this into account when making assignments.

### 3.5.5 Protection Ratios

There are two interference protection ratios built into the computer program. One is for the co-channel case, the other is for the adjacent channel case. The ratios provide 40 dB Desired/Undesired signal ratio for co-channel assignments, and 15 dB Desired/Undesired ratio for the adjacent channel case. These ratios provide an acceptable probability of interference for Public Safety Services.

### 4.0 COMMUNICATIONS REQUIREMENTS

### 4.1 Common Channel Implementation

The implementation of the International Common Channels must follow the guidelines as set forth by the Federal Communications Commission by the approval of the National Plan. These five common channels are accessible by all levels of government and shall be used in accordance with the provisions of the National Plan. All mobile and portable equipment must be equipped to operate in the "talkaround mode" when required on the International Channels.

The International calling channel (821/866.0125 MHz) shall be implemented as a full mobile relay. Wide area coverage transmitters will be installed where applicable within a system. Large system users (5 channels or more) of 800 MHz shall be required to monitor this channel at all times. The area of coverage for this channel shall be equal to the area covered by the licensed system. This may or may not require the use of satellite receivers within the area to meet this requirement.

The four International Tactical (ITAC) Channels will be assigned State-wide, for use as needed by all eligible licensees. These channels are to be used in accordance with the National Plan and in compliance with the regulations as set forth by the Federal Communications Commission. These channels require no special licensing, only that the users be eligible for licensing on the other Public Safety 800 MHz channels as specified in section 90.616 (a) of the FCC Rules and Regulations.

### 4.1.1 Areas of Operation

The common channels shall be available for use throughout the Region. No specific assignments were deemed necessary within the Region.

### 4.1.2 Operation on The Common Channels

Normally, the five interoperable channels are to be used only for activities requiring intercommunications between agencies not sharing any other compatible communications system.

Interoperable channels are not to be used by any level agency for routine, daily operations. In major
emergency situations, one or more ITAC channels may be assigned by the primary Public Safety Agency
within that area of operation. The primary Public Safety agency in each borough, if not defined
elsewhere in the plan, shall be the borough police's Department or Public Safety Department or the lead
agency, which may be any agency licensed to operate in this spectrum, or "on-scene" commander. The
primary Public Safety agency shall be the city level Public Safety Department in situations which occur

Note that the companion of the ITAC.

### 4.1.3 Operation Procedures

On all Common Channels, plain English will be used at all times, and the use of unfamiliar terms, phrases, or codes will not be allowed.

### 4.1.3(I) International Calling Channel (ICALL):

The ICALL channel shall be used to establish contact with other users in a particular Region that can render assistance at an incident. This channel shall not be utilized as an ongoing working channel. Once contact has been established between agencies, an agreed upon ITAC or mutual aid channel shall be used for continued communications.

### 4.1.3(II) International Tactical Channels (ITAC-1 - ITAC-4):

These frequencies are reserved for use by those agencies involved in inter-agency communications. Incidents requiring multi-agency participation will utilize these frequencies as directed by the control agency assuming responsibility for an incident or area of concern. These frequencies may be subdivided according to function in an incident or by geographical location in response to an incident. It is

### 4.3 Requirements For Trunking

All systems operating in the Region having five or more channels will be required to be trunked. Those systems having four or less channels may be conventional. It is strongly suggested that any entity licensing three or more repeaters use trunking.

The FCC in its Report and Order states: "Exceptions will be permitted only when a substantial showing is made that alternative technology would be at least as efficient as trunking or that trunking would not meet operational requirements. Exceptions will not be granted routinely. Strong showings as to why trunking is unacceptable must be presented in support of any request for exception."

Systems that do not meet FCC loading standards can be required to share such frequencies on a non-exclusive basis. Those agencies requesting Data channels only can be required to share channels with adjacent agencies wherever feasible or limit coverage to their geographic area. Exceptions will be considered on a case-by-case basis by the Regional Review Committee.

Depending on systems loading and the need for multiple systems within an area, operators of wide area systems (including, but not limited to, designated "Monitoring Agencies") must provide for coordination between area-wide systems and "Monitoring Agencies". Single municipalities or agencies must restrict design and implementation of their systems(s) to provide only the communications needed within its geopolitical boundaries. The use of trunked systems is encouraged. However, if the total number of radios in service does not reach minimum loading criteria for a trunked system, that user must consider utilizing the next higher system level if 800 MHz trunked radio is available in the area. As systems reach capacity, the smaller system users must consider consolidating their communications systems to formulate one large trunked system.

A requesting applicant for radio communications in the 800 MHz public safety services in the Region will be required to conform to the FCC loading criteria for its proposed system. The provisions of this regional plan must be used as a guide for establishing any new systems. Strict adherence for limiting the area of coverage to the boundaries of the applicant agency's jurisdiction must be observed. Overlap or extended coverage must be minimized, even where systems utilizing 800 MHz trunked radio systems are proposing to intermix systems for cooperative and/or mutual aid purposes.

Antenna heights are to be limited to provide only the necessary coverage for a system. When antenna locations are restricted to only the "high-ground", transmitter outputs and special antenna patterns must be employed to produce only the necessary coverage with the proper amount of ERP. All necessary precautions are to be taken to gain maximum reuse of the limited 800 MHz spectrum.

### 4.4 Channel Loading Requirements

An agency/jurisdiction requesting a single frequency to replace a frequency currently in use that will be turned back for reassignment will not be required to meet loading requirements in order to obtain the new frequency. However, if the single frequency is not loaded to more than 50 units within three years after the license is granted, the frequency will be available for assignment to other agencies on a shared basis in the event that other frequencies meeting the criteria for assignment are exhausted. Shared use of a

### 4.4 Channel Loading Requirements (continued)

comply with the loading standards as outlined below or provide a "Traffic Loading Study" that meets the criteria as outlined below.

### 4.4.1 Loading Tables

EMERGENCY		NON-EMERGENCY		
CHANNELS	UNITS/CHANNEL	CHANNELS	UNITS/CHANNEL	
1 - 5	70	1 - 5	80	
6 - 10	75	6 - 10	90	
11 - 15	80	11 - 15	105	
16 - 20	85	16 - 20	120	

Agencies requesting additional frequencies must show loading of 100 percent or greater on their existing system. Should a demand for frequencies exist after assignable frequencies become exhausted, any system having frequencies assigned under this plan four or more years previously and not loaded to at least 70 percent will lose operating authority on a sufficient number of frequencies to bring the system into compliance with the 70 percent loading standard. Frequencies lost in this manner will be reallocated to other agencies to help satisfy the demand for additional frequencies.

### 4.4.2 Traffic Loading Study

Justification for adding frequencies, or retaining existing frequencies, can be provided by a traffic loading on the loading by number of transmitten are channel. It will be the reconnibility of the

### 4.5 Use of Long Range Communications

During incidents of major proportions, where Public Safety requirements might include the need for long-range communications in and out of a disaster area, alternate radio communications plans are to be addressed by Primary Public Safety agencies within this sub-region. These agencies should integrate the appropriate interface to the long distance communications providers. Such long distance radio communications might be amateur radio operations, satellite communications and/or long range emergency preparedness communications systems, any of or all of which should be incorporated as part of the communications plans of those lead agencies. They then could provide the means to communicate outside the area for themselves and the smaller agencies who might need assistance. Instances as addressed in the National Public Safety Planning Advisory Committee's Plan, such as earthquakes, hurricanes, floods, widespread forest fires, or nuclear reactor problems could be a cause for such long-range communications needs.

### 4.6 Expansion of Existing Systems

Existing systems that are to be expanded to include the frequency bands of 821-824/866-869 MHz will have the mobile radios "grandfathered", provided that they are modified in conformance with the Memorandum Opinion and Order, FCC Docket 87-112. Primarily this involves reducing the modulation to +/- 4 KHz. Existing base stations in the frequency bands 806-821/851-866 MHz may not be used in the frequency bands 821-824/866-869 MHz.

### 5.0 IMPLEMENTATION AND PROCEDURES

### 5.1 Notification

Several methods of notification were used to invite interested parties to participate in the development of this plan. Initially, personal contact was made by the "convenor" to all of the major State agency communications users in the State of ALSAKA. Announcements were made at various group meetings such as the Alaska Peace Officers' Association, the Anchorage Fire fighters Association, the office of Emergency Management, and the Alaska Division of Telecommunications.

Supplemental to the personal contact, an advertisement was placed in a State-wide newspaper several weeks prior to the initial meeting. All APCO Chapter members and a large number of other interested parties who had requested notification were sent letters of invitation. See Appendix  $\underline{C}$ .

During the initial meeting, names, addresses and telephone numbers of those individuals present who wished to either participate in the planning process, or who wanted to be kept informed on the progress of the planning effort were taken. These individuals or agencies were sent all announcements for meetings and bulletins of progress.

When the work on the plan was completed, a final planning committee meeting was called. This meeting was held at the Anchorage Fire Training Center, 1140 Airport Heights Rd., Anchorage, Alaska, on January 8, 1993. Each member of the planning committee was presented with a draft copy of the plan for study. A copy of the final draft was mailed to each member of the committee not present at the meeting. Each plan contained a ballot for voting on the acceptance of the plan. As with the formation of the committee, a public notice was placed in the Anchorage Daily Newspaper (see appendix **D**) announcing the completion of the plan and the intention to file with the Federal Communications Commission.

### 5.2 Frequency Allocation Process

The method used for "packing" Region 2 was APCO's. The approximate geographical location for the center of each borough, in latitude and longitude, along with the approximate radius to cover the borough lines.

This allocation is the minimum and only applies to counties with a population of 10,000 or less. One additional channel is allocated for each additional 10,000 of population.

ANCHORAGE CITY OF 603,607,611,615,619,623,627,631,635,645

647,651,655,659,663,667,671,675,681,

BRISTOL BAY BOROUGH 749,755

FAIRBANKS NORTH STAR 759,763,767,771,775,779

**BOROUGH** 

HAINES BOROUGH 783,787

### 5.2 Frequency Allocation Process (continued)

### 5.2 Frequency Allocation Process (continued)

JUNEAU BOUROUGH OF	685,689,693,697,701,705,709,713,717
KENAIL PENINSULA BOROUGH	791,795,799
KETCHICAN GATEWAY BOROUGH .	803,807
KODIAK ISLAND BOROUGH	811,815
LAKE AND PENINSULA BOROUGH	819,823
MATANUSKA-SUSITNA BOROUGH	605,609,613
NORTH SLOPE BOROUGH	617,621,625
NORTHWEST ARCTIC BOROUGH	629,633
SITKA BOROUGH	637,643
POOLED CHANNELS	721,725,729,733,737,743,747,751,757, 761,765,769,773,777,781,785,789,793, 803,809,813,817,821,825,826,827,828, 829,830

NOTE THAT THE REASON CERTAIN CHANNELS ARE NOT LISTED HERE IS DUE TO ADJACENT-CHANNEL INTERFERENCE PROBLEM.

